

**Pennsylvania Bacteria Pilot**  
EPA Region 3 - Philadelphia - Water Protection Division

**Geographic location or area of activity:** Pine Creek Watershed, located in the Greater Pittsburgh area, Pennsylvania

**Description of activity:** Beginning in 2005, EPA, PADEP and the local groups identified below partnered together in a pilot watershed study to increase the amount of useful bacteriological water quality data available to develop corrective actions. Specifically, this pilot involves the development and implementation of a sampling plan designed to support modeling efforts that will enhance assessment of water contact recreational uses as well as follow-up TMDL work needed to correct impairments. This sampling plan is part of an overall monitoring approach, which includes a network of volunteers that DEP hopes to replicate across the state to increase their assessment of waters for recreational uses and to help evaluate current water quality standards and assessment methodology approaches.

EPA and PADEP provided funds to support the development of a bacteria sampling protocol in the Greater Pittsburgh region. EPA and PADEP worked closely with 3 Rivers Wet Weather Demonstration Program (3 RWWDP) and the Allegheny County Health Department to select candidate watersheds and to develop a sampling plan and associated QA/QC protocol. Pine Creek Watershed was selected due to its range of water quality issues, including combined sewer overflows.

The sampling plan and quality assurance protocol were field tested in beginning the fall of 2006, and more intense sampling was conducted during the 2007 swimming season. Volunteers from the Pine Creek Coalition conducted weekly bacteria sampling at 25 sites throughout the Pine Creek Watershed for a full year. Watershed Coordinators from DEP's Central and Regional Offices worked closely with the group to train them and to transport samples to the lab every week. ALCOSAN provided in-kind services to analyze the samples for both fecal coliform and E. coli, as well as evaluated potential impacts of holding times on sample results.

As the results become available, EPA and DEP will be analyzing the data to test various use attainment scenarios and conditions while building water quality models for TMDL purposes. Carnegie Mellon and/or 3RWWDP will be looking at the data set and may consider looking into bacteria source tracking to accompany the TMDL development.

**Interagency partners:** EPA, PA - DEP

**Local partners:** Pine Creek Watershed Coalition, 3 Rivers Wet Weather Demonstration Program, Allegheny County Sanitary Authority (ALCOSAN), Carnegie-Mellon University, Allegheny County Health Department